## REMARKS / ARGUMENTS

This is intended as a full and complete response to the Final Office Action dated May 31, 2007, having a shortened statutory period for response set to expire on August 31, 2007. Applicants submit this response to place the application in condition for allowance or in better form for appeal. Please reconsider the claims pending in the application for reasons discussed below.

Claims 21-42 are pending in the application. Claims 21-42 remain pending following entry of this response.

### Claim Rejections - 35 U.S.C. § 102

Claims 21-42 are rejected under 35 U.S.C. 102(b) as being anticipated by *Takriti* (US PAT: 6,021,402). Applicant respectfully traverses this rejection.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

In this case, *Takriti* does not disclose "each and every element as set forth in the claim." For example, *Takriti* does not disclose a method for identifying an excess energy capacity in a production supply chain operated by a supply chain operator. In particular, *Takriti* does not disclose the method as recited by claim 21 that includes identifying, by a supply chain optimizer, a potential production configuration for the production supply chain, where the supply chain operator both:

- operates at least one power generation facility **to sustain industrial production by the production supply chain**, and
- is capable of **both consuming and selling electricity** produced by the power generation facility **while operating the production supply chain**.

Claims 28 and 35 recite similar limitations. The Examiner continues to suggest that *Takriti* discloses a method that includes these limitations. Specifically, regarding claims 21, 28, 35 and 40-42, the Examiner suggests:

> *Takriti* discloses a computer-implemented method for identifying an excess energy capacity in a production supply chain operated by a supply chain operator, comprising: identifying, by a supply chain optimizer, a potential production configuration for the production supply chain (*i.e., a mathematical model of the problem is solved using appropriate optimization techniques. The solution provides the status of each generator at each time period of the planning horizon under each given scenario. By "status of a generator", what is meant is whether it is on or off. The solution also provides the load on each generator during each period in which it is operating,' an optimal fuel mix for each generating unit, and the prices for purchasing and selling power in the periods of the planning horizon. The technique used to solve the model provides information regarding the sensitivity of the solution to the input parameters and other valuable information to the decision maker.*)

*Office Action*, p 2-3. The italicized portion quotes *Takriti*, 5:7-18. First, nothing in the cited passage discloses anything to do with a production supply chain operated by a supply chain operator. Applicant respectfully submits that the passage from *Takriti* describing "a mathematical model" used to determine whether to turn on (or off) a power generator at different periods of time fails to disclose a supply chain operator that operates at least one power generation facility to sustain industrial production by the production supply chain. Instead, the passage describes what it describes, a mathematical model that may be used to optimize when an electrical utility turns on (or off) a generator.

Second, when viewed in full context, it is clear that *Takriti* is directed to the operations of an electric utility in determining when, and how much, electricity to generate. For example, set out more fully, the passage cited by the Examiner provides:

> The invention provides a computer implemented process for scheduling the generating units of a utility while taking into consideration power trading with other utilities and the stochastic load on the system. The system allows the user to provide multiple load forecasts and to vary the fuel price between the different scenarios

> and the different periods of the planning horizon. The tool allows the user to model accurately the uncertain trading transactions and the changing fuel prices. Given (1) a planning horizon, (2) a set of electric-load forecasts and fuel prices, (3) a full description of the properties of the electric-power generators, (4) reserve requirements for the system, (5) an estimate of the price of electricity in the open market at each hour of the week, and (6) a set of possible trading transactions for the next two to seven days, the goal is to meet the electric demand of customers at a minimal cost while making the maximum profit possible from power trading. To do so, a mathematical model a mathematical model of the problem is solved using appropriate optimization techniques. …

*Takriti*, 4:57-67 – 5:1-17. Moreover, the passage cited by the Examiner from *Takriti* is squarely directed to the optimizing the operations of an electrical utility, and not to optimizing the operations of a production supply chain for a supply chain operator "capable of both consuming and selling electricity produced by the power generation facility while operating the production supply chain," as recited by claim 1. Regarding this limitation, the Examiner suggests:

> [*Takriti* discloses] the supply chain operator also operates at least one power generation facility to sustain industrial production by the production supply chain (see fig. 2 element 12), (ii) the supply chain operator is capable of both consuming and selling electricity produced by the power generation facility while operating the production supply chain (i.e., marginal prices and sensitivity analysis for buying and selling, fig. 2).

*Office Action*, p.3. However, *Takriti* describes Figure 2, element 12, as follows: "The output of the tool 111 is the fuel consumption, fuel mix, and generation requirement to each of a plurality of generating plants $12_1$ to $122_n$ which are connected to transmission lines 13 for delivery of electrical power to customers $14_1$ to $14_m$ and to other utilities 15." *Takriti*, 6:11-15. In other words, Figure 2, element 12 merely refers to "a plurality of generating plants." No description of a production supply chain or a supply chain operator is described, or even implied.

Based on the quoted passages, it should be clear that *Takriti* is directed to a tool used to optimize the operations of an electrical utility and does not disclose a method for identifying an excess energy capacity in a production supply chain

operated by a supply chain operator having the limitations recited by the present claims. Other passages from *Takriti* only serve to further highlight this distinction:

> It is therefore an object of the invention to provide a computer risk-management system for scheduling the generating units of an electric utility.
> It is another object of the invention to provide computer implemented process that manages generating units of an electric utility which handles multiple fuel, fuel constraints, varying fuel prices, power trading, and load uncertainty.

*Takriti*, 4:50-57.

> The present invention is a tool that can be used to schedule the generating units of an electric utility while taking power trading and fluctuation in fuel prices into consideration. This tool mixes traditional techniques used in scheduling generators of an electric utility with hedging strategies that are widely used in the finance industry. The result is a robust generating schedule.

*Takriti* 5:65-67 – 6:1-5.

> The present invention provides a utility with a tool that promotes a better understanding of the relationship between the electric-power and fuel markets allowing a utility to hedge against uncertainty in both markets.

*Takriti*, 7:46-54. The common thread through all these passages is a focus on the desirability for an electrical utility to optimize its operations. In contrast, the claims recite a method for an operator of an industrial production facility that happens to have some electrical generation capacity, to optimize a production supply chain. For example,

> The process of deregulation of the utility industry has already occurred in several states and there presently exists an increased trend toward deregulation throughout the United States. This change in regulatory environment creates the potential for altering the value of industrial power generation facilities which have been utilized for production support in businesses that require large amounts of electrical power such as air component separation facilities, oil field electric pump networks, refineries, iron production facilities, and the like.

*Application*, ¶ 0004.

Furthermore, regarding claims 40, 41, and 42, the Examiner does not provide an argument that *Takriti* discloses the limitations of these claims. MPEP 707.07(d) provides that "[a] plurality of claims should never be grouped together in a common rejection, unless that rejection is equally applicable to all claims in the group." In this case, the claims recite substantially different limitations that are not amenable to a common rejection. For example, claim 40 further specifies that "the production supply chain comprises one of an air component separation facility, an oil field electric pump network, a refinery, and a metal ore production facility." Claims 41 and 42 include a similar limitation characterizing claims 28 and 35, respectively. Other than including these claims in the list of claims rejected over the *Takriti* reference, the Examiner does not provide any rationale for rejecting claims 40, 41, and 42. From the above discussion, it should be clear that *Takriti* does not disclose a method for optimizing the operations of a production supply chain in general, and in particular, where the "production supply chain" comprises "an air component separation facility, an oil field electric pump network, a refinery, and a metal ore production facility."

Accordingly, for all the foregoing reasons, Applicants submit that *Takriti* does not anticipate claims 21-42.

## CONCLUSION

Accordingly, it is believed that the present application now stands in condition for allowance, and allowance of the claims is respectfully requested. Early notice to this effect is earnestly solicited. If the Examiner believes any issues remain that prevent this application from going to issue, the Examiner is strongly encouraged to contact the undersigned attorney at the number listed below, or Gero McClellan at (336) 643-3065, to discuss strategies for moving prosecution forward toward allowance.

Respectfully submitted, and
**S-signed pursuant to 37 CFR 1.4**,

/Gero G. McClellan, Reg. No. 44,227/

Gero G. McClellan
Registration No. 44,227
PATTERSON & SHERIDAN, L.L.P.
3040 Post Oak Blvd. Suite 1500
Houston, TX 77056
Telephone: (713) 623-4844
Facsimile: (713) 623-4846
Attorney for Applicants